

WR Hydrology Science Meeting Agenda

Objectives: This meeting will focus on the current and desired future capabilities in NWS water resources prediction. The gap between the current and future NWS operations will be clearly defined. A plan for bridging this gap will be discussed on Thursday including (1) what the various NWS offices can do, (2) what collaborative work is necessary, and (3) identification of what research should be done.

Day 1: Tuesday October 4, 2005

8:00 Registration

8:30 Kevin Werner (NWS/WR): Welcoming Remarks, Objective, and Schedule

Session 1: NOAA Vision and Direction: How will NOAA's role in hydrology change in the future? What is needed to achieve the agency's vision?

Chair: Andy Edman

8:45 Vickie Nadolski (NWS/WR Director): NWS Western Region: Background and overview

9:00 Gary Carter (NWS/OHD Director) and Tom Graziano (NWS/OCWWS/HSD Chief): NOAA Water Resources: Current capabilities, current development, and vision for the future. What major gaps exist between current capabilities and the vision? What are specific areas that need attention?

10:15 Break

10:30 Marty Ralph (NOAA/OAR): NOAA Research: What are OAR labs currently doing in the water resources arena? What are the OAR priorities for hydrology? How can universities and NWS help with priorities?

11:00 Jin Huang (NOAA/OGP): NOAA Office of Global Programs: OGP priorities in water resources. How are these priorities set?

11:15 Bob Livezy / Mike Brewer (NWS/CSD): NWS Climate Program

11:30 Josh Foster (NOAA/Climate): NOAA Climate Transition Program

11:40 Discussion of session 1: What are the keys to realizing the NOAA water resources vision?

12:00 Lunch

Session 2: River and Weather Forecast Topics: RFC/WFO Current capabilities, ongoing development, and desired future capabilities.

Chair: Michelle Schmidt

1:15 Harold Opitz (NWS/NWRFC), David Brandon (NWS/CBRFC), Rob Hartman (NWS/CNRFC)

3:30 Break

3:45 WFO topics

4:15 Discussion of Session 2: What are the priorities for NWS field offices? Can we arrive at a consensus of top 3-5 priorities?

4:45 Finish Day 1

5:30 Icebreaker and Group Dinner (Location TBA)

Day 2: Wednesday, October 5, 2005

Session 3: Customer topics: How do customers currently use NWS hydrologic products? What do they like? What do they need to do their job better?

Chair: Andrea Ray

8:30 Chris Cutler (USBR – Upper Colorado)

8:40 Nancy Stephan (BPA)

8:50 Terry Fulp (USBR – Lower Colorado)

9:00 Michelle Garrison (Colorado State DNR)

9:10 Andrea Ray (NOAA/CDC)

9:15 Panel Discussion: What are customer priorities? Can we arrive at a consensus of top 3-5 priorities?

10:00 Break

Session 4: Science Priorities: Current research and development efforts. What is being done and how is it applicable to NWS operations?

HYDROLOGY PREDICTION

Chair:

10:20 David S. Bowles (Utah State Univ.): Reservoir Release Forecast Model for Flood Operation of the Folsom Project including Forecast-based operations

10:40 Jill Glenn (Idaho Power): Effects of applying average meteorological data to State Based Model

11:00 Kristie Franz (Univ. California – Irvine): Snow model evaluations for ensemble streamflow forecasting

11:20 John Schaake (NWS/OHD): OHD Ensemble Project

11:40 Andy Wood (Univ. Washington): A multi-model hydrologic ensemble for seasonal streamflow forecasting in the western US.

12:00 Lunch

1:10 Levi Brekke (USBR): Development of a teleconnections-based system for longer-lead snowmelt forecasting in the western US.

1:30 Bisher Imam (Univ. California – Irvine)

1:50 Tom Hamill (NOAA/CDC): Probabilistic QPF Using Reforecasts

2:10 Chris Daly (Oregon State Univ.): Development and use of targeted climatologies

2:30 Brad Heilwagen (Idaho Power): Impact of Cloud Seeding Program

2:50 Marty Ralph (NOAA/OAR): HMT-West status and opportunities for collaboration

3:10 Break

3:30 Jay Day (Riverside Technology, Inc.): Stream flow regulation and ESP

3:50 Mike Schaffner (NWS/WFO – Tucson): Real-time Distributed Modeling at a Local Weather Forecast Office

4:10 Martyn Clark (CIRES): Ensemble snow

4:30 John Schaake (NWS/OHD): Distributed Model Intercomparison Project

4:50 Discussion of Session 4: Where can research most help NWS operations? Are there particular areas where collaboration would most benefit both?

5:00 Finish Day 2

Day 3: Thursday, October 6, 2005

Session 4 continued

FLASH FLOOD and BURN AREA HYDROLOGY

Chair: Bill Reed

8:30 Bill Reed (NWS/CBRFC): An overview of NWS burn hydrology efforts

8:40 Pedro Restrepo (NWS/OHD): The joint NOAA/NWS – USGS Debris Flow Warning System

9:00 Sue Cannon (USGS): Post-wildfire debris flows from a Geologic perspective and Rainfall Intensity-Duration Thresholds as the Basis for Post-Wildfire Flash Flood and Debris Flow Warnings

9:20 Jay Breidenbach (NWS/WFO – Boise): Science issues associated with the Hot Creek Burn Scar in Central Idaho - a case study.

9:40 Terri Hogue (UCLA): Improving the understanding and prediction of post-fire hydrology

10:00 Greg Smith (NWS/CBRFC)

10:20 Discussion of Session 4: Where can research most help NWS operations? Are there particular areas where collaboration would most benefit both?

10:40 Break

Session 5: Moving Forward: The meeting objectives are to discuss ideas and recommendations for bridging the gap between current operations and vision for the future. What strategic plans and/or projects can we identify and support to move the NWS ahead?

Chair: Kevin Werner

11:00 Gary Carter (NWS/OHD): Water Science Center

11:30 Pedro Restrepo (NWS/OHD): Community Hydrologic Prediction System

12:00 Lunch

1:15 Panel Discussion on how to move the water resources prediction profession forward:

- Strategic recommendations and plans
- Short-term (0-3 year) projects and solutions?

4:00 Adjourn